

SEQUENCE L

<110> Morin, Gregg B.
Lichtsteiner, Serge
Vasserot, Alain
Adams, Robert R.
Cardoza, Lisa M.
Lebkowski, Jane S.
Geron Corporation

<120> Telomerase Reverse Transcriptase Transcriptional
Regulatory Sequences

<130> 019/250PCT

<140> PCT/US00/03104

<141> 2000-02-04

<160> 23

<170> PatentIn Ver. 2.1

<210> 1

<211> 15418

<212> DNA

<213> Homo sapiens

<220>

<223> Human TERT promoter

<400> 1

gcggccgcga gctctaatac gactcactat agggcgctcga ctcgatcaat ggaagatgag 60
gcattgccga agaaaagatt aatggatttg aacacacagc aacagaaact acatgaagtg 120
aaacacagga aaaaaaagat aaagaaacga aaagaaaagg gcatcagtga gcttcagcag 180
aagttccatc ggccttacat atgtgtaagc agaggccctg taggagcaga ggcaggggga 240
aaatacttta agaaataatg tctaaaagtt tttcaaatat gaggaaaaac ataaaaccac 300
agatccaaga agctcaacaa aacaaagcac aagaacagg aagaaattaa aagttatatc 360
acagtcaaat tgctgaaaac cagcaacaaa gagaatatct taagagtatc agaggaaaag 420
agattaatga caggccaaga aacaatgaaa acaatacaga tttcttgtag gaaacacaag 480
acaaaagaca ttttttaaaa ccaaaaggaa aaaaaatgct acattaaaat gttttttacc 540
cactgaaagt atatttcaaa acatatatta ggccaggcctt ggtggctcac acctgtaac 600
ccagcacttt gggaggccaa ggtgggtgga tcgcttaagg tcaggagtgc gagaccagcc 660
tgccaatat agcgaaaccc catctgtact aaaaacacaa aaattagctg ggtgtggtga 720
ccatgacctg taatcccagg tactcaggag gctaaggcag gagaattgct tgaactggga 780
ggcagagggtg gtgagccaag attgcaccag tgcaactccag ccttggtgac agagtgaac 840
tccatctcaa aaacaacaa acaaaatata tatacataaa tatatatgca catatatata 900
catatataaa tatatatata catatataaa tctatatata tatatacata tatacacata 960
tataaatcta tatacatata tatacatata taatatattt acatatataa atatatacat 1020
atataaatat acatatataa atacatatat aaatatatat atataaatat acatatataa 1080
aatatataaa atatacaagt atatacaaat atatacatat ataaaatat atacatatat 1140
acatatatat ataaatatat aaaaaaactt ttggctgggc acctttccaa atctcatggc 1260
acatataggt ctcatggtaa cctcaaataa aaaaacatat aacagatata ccaaaaaataa 1320
aaaccaataa attaaatcat gccaccagaa gaaattacct tcactaaaag gaacacagga 1380
aggaaagaaa gaaggaagag aagaccatga aacaaccaga aaacaaacaa caaacacagca 1440
ggagtaattc ctgacttatc aataataatg ctgggtgtaa atggactaaa ctctccaatc 1500
aaaagacata gagggtgctga atggacgaaa aaaacaagac tcaataatct gttgcctaca 1560
agaatatact tcacctataa agggacacat agactgaaaa taaaagggaag gaaaaatatt 1620
ctatgcaaat ggaaacaaa aaaagaacag aactagctac acttatatca gacaaaatag 1680

atttcaagac	aaaa	gtaca	aaaagagaca	aagtaattat	ataa	taataa	agcaaaaaaga	1740
tataacaatt	gtgaatttat	atgcycccaa	cactgggaca	cccagatata	tacagcaaat			1800
attattagaa	ctaaggagag	agagagatcc	ccatacaata	atagctggag	acttcacccc			1860
gcttttagca	ttggacagat	catccagaca	gaaaatcaac	caaaaaattg	gacttaatct			1920
ataatataga	acaaatgtac	ctaattgatg	tttacaagac	atttcatcca	gtagttgcag			1980
aatatgcatt	ttttcctcag	catattggatc	atttctcaagg	atagaccata	tattaggcca			2040
cagaacaagc	cattaaaaat	tcaaaaaaat	tgagccaggc	atgatggctt	atgcttgtaa			2100
ttacagcact	ttggggaggg	tgaggtggga	ggatgtcttg	agtacaggag	tttgagacca			2160
gcctgggcaa	aatagtgaga	ccctgtctct	acaaactttt	ttttttaatt	agccaggcat			2220
agtgggtgtg	gcctgtagtc	ccagctactt	aggaggcaga	agtggggagga	tcacttgagc			2280
ccaagagttc	aaggctacgg	tgagccatga	ttgcaacac	acacaccagc	cttggtgaca			2340
gaatgagacc	ctgtctcaaa	aaaaaaaaaa	aaaattgaaa	taataataaag	catcttctct			2400
ggccacagtg	gaacaaaacc	agaaatcaac	aacaagaggc	atattgaaaa	ctatacaaac			2460
acatgaaaat	taaacaatat	acttctgaat	aaccagttag	ttaattgaaga	aattaaaaag			2520
gaaattgaaa	aattttattta	agcaaattgat	aacggaaaca	taacctctca	aaacccacgg			2580
tatacagcaa	aagcagtgtc	aagaagggaag	tttatagcta	taagcagcta	catcaaaaaa			2640
gtagaaaagc	caggcgagc	ggctcatgcc	tgtaatccca	gcactttggg	aggccaaggc			2700
gggcagatcg	cctgaggtca	ggagttcgag	accagcctga	ccaacacaga	gaaaccttgt			2760
cgctactaaa	aatacaaaaat	tagctgggca	tggtggcaca	tgccctgtaat	cccagctact			2820
cgggaggctg	aggcaggata	accgcttgaa	cccaggaggt	ggaggttgcg	gtggccgggg			2880
attgcgccat	tggaactccag	cctgggtaac	aagagtgaag	ccctgtctca	agaaaaaaa			2940
aaaagtagaa	aaacttaaaa	atacaaccta	atgatgcacc	ttaaagaact	agaaaagcaa			3000
gagcaaaacta	aacctaaaat	tggtaaaaga	aaagaaataa	taaagatcag	agcagaaata			3060
aatgaaactg	aaagataaca	atacaaaaga	tcaacaaaat	taaaagttag	ttttttgaaa			3120
agataaaaca	aattgacaaa	cctttgcccc	gactaagaaa	aaaggaaaaga	agacctaaat			3180
aaataaagtc	agagatgaaa	aaagagacat	tacaactgat	accacagaaa	ttcaaaggat			3240
cactagaggc	tactatgagc	aactgtacac	tataaaattg	aaaaacctag	aaaaaataga			3300
taaattccta	gatgcataca	acctaccaag	attgaaccat	gaagaaatcc	aaagcccaaa			3360
cagaccaata	acaataatgg	gattaaagcc	ataataaaaa	gtctcctagc	aaagagaagc			3420
ccaggaccca	atggcttccc	tgctggattt	taccaatcat	ttaaagaaga	atgaattcca			3480
atcctactca	aactattctg	aaaaatagag	gaaagaatac	ttccaaactc	attctacatg			3540
gccagtatta	ccctgattcc	aaaaccagac	aaaaacacat	caaaaaacaa	caaacaaaaa			3600
aacagaaaga	aagaaaacta	caggccaata	tccttgatga	atactgatac	aaaaatcctc			3660
aacaaaacac	tagcaaacca	aattaaacaa	caccttcgaa	agatcattca	ttgtgatcaa			3720
gtgggattta	ttccagggat	ggaaggatgg	ttcaacatat	gcaaatcaat	caatgtgata			3780
catcatccca	acaaaatgaa	gtacaaaaac	tatatgatta	tttcacttta	tgcagaaaaa			3840
gcatttgata	aaattctgca	cccttcatga	taaaaaccct	caaaaaacca	ggtatacaag			3900
aaacatacag	gccaggcaca	gtggctcaca	cctgcgatcc	cagcactctg	ggaggccaag			3960
gtgggatgat	tgcttggggc	caggagtttg	agactagcct	gggcaacaaa	atgagacctg			4020
gtctacaaaa	aactttttta	aaaaatttagc	caggcatgat	ggcatatgcc	tgtagtccca			4080
gctagtctgg	aggctgaggt	gggagaatca	cttaagccta	ggaggtcgag	gctgcagtga			4140
gccatgaaca	tgtcactgta	ctccagccta	gacaacagaa	caagacccca	ctgaataaga			4200
agaaggagaa	ggagaaggga	gaaaggaggg	agaaggaggg	aggaggagaa	ggaggagggtg			4260
gaggagaagt	ggaaggggaa	ggggaaggga	aagagggaaga	agaagaaaca	tatttcaaca			4320
taataaaaagc	cctatatgac	agaccgaggt	agtattatga	ggaaaaactg	aaagcctttc			4380
ctctaagatc	tggaaaatga	caagggccca	ctttcaccac	tgtgattcaa	catagtacta			4440
gaagtcctag	ctagagcaat	cagataagag	aaagaaataa	aaggcatcca	aactggaaag			4500
gaagaagtca	aattatcctg	tttgcatgtg	atatgatctt	atatctggaa	aagacttaag			4560
acaccactaa	aaaactatta	gagctgaaat	ttggtacagc	aggatacaaa	atcaatgtac			4620
aaaaatcagt	agtattttcta	tattccaaca	gcaaaacaatc	tgaaaaagaa	acaaaaaaag			4680
cagctacaaa	taaaattaaa	cagctaggaa	ttaaccaaag	aagtgaagaa	tctctacaat			4740
gaaaactata	aaatattgat	aaaagaaatt	gaagagggca	caaaaaaaga	aaagatatctc			4800
catgttcata	gattggaaga	ataaatactg	ttaaaatgtc	catactaccc	aaagcaattt			4860
acaaattcaa	tgcaatccct	attaaaatac	taatgacgtt	cttcacagaa	atagaagaaa			4920
caattctaag	atttgtacag	aaccacaaaa	gaccagaat	agccaaagct	atcctgacca			4980
aaaagaacaa	aactggaagc	atcacattac	ctgacttcaa	attatactac	aaagctatag			5040
taacccaaac	tacatggtac	tggcataaaa	acagatgaga	catggaccag	aggaacagaa			5100
tagagaatcc	agaaacaaat	ccatgcattct	acagtgaact	catttttgac	aaaggtgcca			5160
agaacatact	ttggggaaaa	gataatctct	tcaataaatg	gtgctggagg	aactggatat			5220
ccatatgcaa	aataacaata	ctagaactct	gtctctcacc	atatacaaaa	gcaaatcaaa			5280

atggatgaaa	ggcttaaatc	taaaacctca	aacttttgcaa	ctactaaaag	aaaacaccgg	5340
agaaactctc	caggacattg	gagtgggcaa	agacttcttg	agtaattccc	tgcaggcaca	5400
ggcaacccaa	gcaaaaacag	acaaatggga	tcatatcaag	ttaaaaagct	tctgcccagc	5460
aaaggaaaca	atcaacaaag	agaagagaca	acccacagaa	tgggagaata	tattttgcaa	5520
ctattcatct	aacaaggaat	taataaccag	tatatataag	gagctcaaac	tactctataa	5580
gaaaaacacc	taataagctg	attttcaaaa	ataagcaaaa	gatctgggta	gacattttctc	5640
aaaataagtc	atacaaatgg	caaacaggca	cttgaaaatg	tgctcaacac	cactgatcat	5700
cagagaaatg	caaatacaaa	ctactatgag	agatcatctc	accccagtta	aaatggcttt	5760
tattcaaaaag	acaggcaata	acaaatgcc	gtgaggatgt	ggataaaaagg	aaacccttgg	5820
acactgttgg	tgggaatgga	aattgctacc	actatggaga	acagtttg880		
aaaactaaaa	ataaagctac	catacagcaa	tcccattgct	aggtatatac	tccaaaaaag	5940
ggaatcagtg	tatcaacaag	ctatctccac	tcccacattt	actgcagcac	tgttcatagc	6000
agccaaggtt	tgggaagcaac	ctcagtgctc	atcaacagac	gaatggaaaa	aqaaaatgtg	6060
gtgcacatac	acaatggagt	actacgcagc	cataaaaaag	aatgagatcc	tgtcagttgc	6120
aacagcatgg	ggggcactgg	tcagtatgtt	aagtgaataa	agccaggcac	agaaagacaa	6180
acttttcatg	ttctccctta	cttgtgggag	caaaaattaa	aacaattgac	atagaaatag	6240
aggagaatgg	tgggttctaga	gggggtgggg	acagggtgac	tagagtcaac	aataatttat	6300
tgtatgtttt	aaaataacta	aaagagtata	attgggttgt	ttgtaacaca	aagaaaggat	6360
aaatgcttga	aggtgacaga	taccccat	accctgatgt	gattattaca	cattglatgc	6420
ctgtatcaaaa	atatctcatg	tatgctatag	atataaacc	tactatatta	aaaattaaaa	6480
ttttaatggc	caggcacagg	ggctcatgtc	cataatccca	gcactttggg	aggccgaggc	6540
ggtggatcac	ctgaggtcag	gagtttgaaa	ccagtctggc	caccatgatg	aaaccctgtc	6600
tctactaaaag	atacaaaaat	tagccaggcg	tgggtggcaca	tacctgtagt	cccaactact	6660
caggaggctg	agacaggaga	attgcttgaa	cctgggaggc	ggaggttgca	gtgagccgag	6720
atcatgccac	tgcactgcag	cctgggtgac	agagcaagac	tccatctcaa	aacaaaaaca	6780
aaaaaaagaa	gattaaaatt	gtaattttta	tgtaccgtat	aaatatatac	tctactatat	6840
tagaagttaa	aaattaaaaa	aattataaaa	ggtaattaac	cacttaattc	aaaataagaa	6900
caatgtatgt	gggggttcta	gcttctgaag	aagtaaaagt	tatggccacg	atggcagaaa	6960
tgtgaggagg	gaacagtgga	agttactgtt	gttagacgct	catactctct	gtaagtgact	7020
taatttttaac	caaagacagg	ctggggagaag	ttaaagaggc	attctataag	ccctaaaaca	7080
actgctaata	atggtgaaag	gtaatctcta	ttaattacca	ataattacag	atatctctaa	7140
aatcgagctg	cagaattggc	acgtctgata	acaccgtcct	ctcattcacg	gtgctttttt	7200
tcttgtgtgc	ttggagattt	tcgatttgtt	gttcgtgttt	ggttaaaact	aatctgtatg	7260
aatcctgaaa	cgaaaaatgg	tgggtgattt	ctccagaaga	attagagtac	ctggcaggaa	7320
gcaggtggct	ctgtggacct	gagccacttc	aatcttcaag	ggtctctggc	caagaccag	7380
gtgcaaggca	gaggcctgat	gacccgagga	caggaaagct	cggatgggaa	ggggcgatga	7440
gaagcctgcc	tcgttgggtg	gcagcgcag	aagtgcctt	atttacgctt	tgcaaagatt	7500
gctctggata	ccatctggaa	aaggcggcca	gcgggaatgc	aaggagtcat	aagcctcctg	7560
ctcaaacc	ggccagcagc	tatggcgccc	acccgggctg	gtgccagagg	gagaggagtc	7620
aaggcacctc	gaagtatggc	ttaaatcttt	ttttcacctg	aagcagtgc	caagggtgat	7680
tctgagggaa	gcttgagtta	ggtgccttct	ttaaaacaga	aagtcattga	agcacccttc	7740
tcaagggaaa	accagacgcc	cgtctgcgg	tcatttacct	ctttcctctc	tccctctctt	7800
gccctcgcg	tttctgatcg	ggacagagtg	accccgctgg	agcttctccg	agcccgctgt	7860
gaggaccctc	ttgcaaagg	ctccacagac	ccccgccttg	gagagaggag	tctgagcctg	7920
gcttaataac	aaactgggat	gtggctgggg	gcggacagcg	acggcgggat	tcaaagactt	7980
aattccatga	gtaaattcaa	cctttccaca	tccgaatgga	tttggaattt	atcttaatat	8040
tttcttaaat	ttcatcaaat	aacattcagg	agtgcagaaa	tccaaaggcg	taaaacagga	8100
actgagctat	gtttgccaag	gtccaaggac	ttataacca	tgttcagagg	gatttttcgc	8160
cctaagtact	ttttattggt	tttcataagg	tggcttaggg	tgcaagggaa	agtacacgag	8220
gagaggactg	ggcggcagg	ctatgagcac	ggcaaggcca	ccggggagag	agtccccggc	8280
ctgggaggct	gacagcagga	ccactgaccg	tcctccctgg	gagctgccac	attgggcaac	8340
gcgaaggcgg	ccacgctgcg	tgtgactcag	gacccatac	cggcttctctg	ggccaccca	8400
cactaacc	ggaagtcacg	gagctctgaa	cccgtggaaa	cgaacatgac	ccttgccctgc	8460
ctgcttccct	gggtgggtca	agggtaatga	agtgggtgtg	aggaaatggc	catgtaaat	8520
acacgactct	gctgatgggg	accgttcctt	ccatcattat	tcatcttcac	ccccaggac	8580
tgaatgattc	cagcaacttc	ttcgggtgtg	acaagccatg	acaacactca	gtacaaacac	8640
cactctttta	ctaggcccac	agagcacggc	ccacaccctt	gatataattaa	gagtcaggga	8700
gagatgaggc	tgctttcagc	caccaggctg	gggtgacaac	agcggctgaa	cagtctgttc	8760
ctctagacta	gtagaccctg	gcaggcactc	ccccagattc	tagggcctgg	ttgctgcttc	8820
ccgagggcgc	catctgccct	ggagactcag	cctgggggtg	cacactgagg	ccagccctgt	8880

ctccacaccc	tccgcctcca	ggcctcagct	tctccagcag	cttcctaaac	cctgggtggg	8940
ccgtgttcca	gcgctactgt	ctcacctgtc	ccactgtgtc	ttgtctcagc	gacgtagctc	9000
gcacggttcc	tcctcacatg	gggtgtctgt	ctccttcccc	aacactcaca	tgcgttgaag	9060
ggaggagatt	ctgcgcctcc	cagactggct	cctctgagcc	tgaacctggc	tcgtggcccc	9120
cgatgcaggt	tcctggcgtc	cggctgcacg	ctgacctcca	tttccaggcg	ctccccgtct	9180
cctgtcatct	gccggggcct	gccggtgtgt	tcttctgttt	ctgtgtcctt	ttccacgtcc	9240
agctgcgtgt	gtctctgtcc	gctaggtgtc	cggggttttt	ataggcatag	gacgggggcg	9300
tgggtggcca	gggcgctctt	gggaaatgca	acatttgggg	gtgaaagtag	gagtgcctgt	9360
cctcacctag	gtccacgggc	acaggcctgg	ggatggagcc	cccgccaggg	acccgccctt	9420
ctctgcccag	cacttttctg	ccccctccc	tctggaacac	agagtggcag	tttccacaag	9480
cactaagcat	cctcttccca	aaagaccag	cattggcacc	cctggacatt	tgccccacag	9540
ccctgggaat	tcacgtgact	acgcacatca	tgtacacact	cccgctccag	accgaccccc	9600
gctgttttat	tttaatatgt	acaaagcagg	gaaatccctg	ctaaaatgtc	ctttaacaaa	9660
ctgggttaa	aaacgggtcc	atccgcacgg	tggacagttc	ctcacagtga	agaggaacat	9720
gccgtttata	aagcctgcag	gcattctcaag	ggaattacgc	tgagtcaaaa	ctgccacctc	9780
catgggatac	gtacgcaaca	tgctcaaaaa	gaaagaattt	caccccatgg	caggggagtg	9840
gttggggggg	taaggacggt	gggggcagca	gctgggggct	actgcacgca	ccttttacta	9900
aagccagttt	cctggttctg	atggtattgg	ctcagttatg	ggagactaac	catagggggg	9960
tggggatggg	ggaacccgga	ggctgtgcca	tctttgccat	gcccagagtg	cctgggagag	10020
ataatgctct	agagatgccc	acgtcctgat	tccccaaaac	ctgtggacag	aacccgcccc	10080
gccccagggc	ctttgcaggt	gtgatctccg	tgaggaccct	gaggtctggg	atccttcggg	10140
actacctgca	ggcccgaaaa	gtaatccagg	ggttctggga	agaggcgggc	aggaggggtca	10200
gaggggggca	gcctcaggac	gatggaggca	gtcagtctga	ggctgaaaag	ggagggaggg	10260
cctcgagccc	aggcctgcaa	gcgcctccag	aagctggaaa	aagcggggaa	gggaccctcc	10320
acggagcctg	cagcaggaag	gcacggctgg	cccttagccc	accaggggcc	atcgtggacc	10380
tccggcctcc	gtgccatagg	agggcactcg	cgctgccctt	ctagcatgaa	gtgtgtgggg	10440
atttgagaa	gcaacaggaa	acccatgcac	tgtgaactca	ggattatttc	aaaacaaagg	10500
tttacagaaa	catccaagga	cagggtgaa	gtgcctccgg	gcaagggcag	ggcaggcacg	10560
agtgtattta	tttagctatt	ttattttatt	tacttacttt	ctgagacaga	gttatgctct	10620
tgttgcccag	gctggagtgc	agcggcatga	tcttggtcca	ctgcaacctc	cgtctcctgg	10680
gttcaagcaa	ttctcgtgcc	tcagcctccc	aagtagctgg	gatttcaggc	gtgcaccacc	10740
acacccggct	aattttgtat	ttttagtaga	gatgggcttt	caccatgttg	gtcaggctga	10800
tctcaaaatc	ctgacctcag	gtgatccgcc	cacctcagcc	tcccaaagtg	ctgggattac	10860
aggcatgagc	cactgcacct	ggcctattta	accattttta	aacttccctg	ggctcaagtc	10920
acacccactg	gtaaggagtt	catggagttc	aatttcccct	ttactcagga	gttaccctcc	10980
tttgatattt	tctgtaattc	ttcgtagact	ggggatacac	cgtctcttga	catattcaca	11040
gtttctgtga	ccacctgtta	tcccatggga	cccactgcag	gggcagctgg	gaggctgcag	11100
gcttcaggtc	ccagtggggt	tgccatctgc	cagtagaaac	ctgatgtaga	atcaggggcg	11160
gagtgtggac	actgtcctga	atctcaatgt	ctcagtgtgt	gctgaaacat	gtagaaatta	11220
aagtccatcc	ctcctactct	actgggattg	agccccctcc	ctatcccccc	ccaggggcag	11280
aggagtccct	ctcactcctg	tggagggaag	aatgatactt	tgttattttt	cactgctggg	11340
actgaatcca	ctgtttcatt	tgttggtttg	tttggtttgt	tttgagaggc	ggtttcactc	11400
ttgttgctca	ggctggaggg	agtgcaatgg	cgcgatcttg	gcttactgca	gcctctgcct	11460
cccaggttca	agtgattctc	ctgcttccgc	ctcccatttg	gctgggatta	caggcacccg	11520
ccaccatgcc	cagctaattt	tttgattttt	tagtagagac	gggggtgggg	gtgggggttc	11580
ccatgttggc	caggctggtc	tcgaacttct	gacctcagat	gatccacctg	cctctgcctc	11640
ctaaaagtgt	gggattacag	gtgtgagcca	ccatgccag	ctcagaattt	actctgttta	11700
gaaacatctg	ggtctgaggt	aggaagctca	ccccactcaa	gtgttggtgt	gttttaagcc	11760
aatgatagaa	tttttttatt	gttggttagaa	cactcttgat	gttttacact	gtgatgacta	11820
agacatcatc	agcttttcaa	agacacacta	actgcaccca	taatactggg	gtgtcttctg	11880
ggtatcagcg	atcttcattg	aatgccggga	ggcgtttcc	cgccatgcac	atggtgttaa	11940
ttactccagc	ataatcttct	gcttccattt	cttctcttcc	ctctttttaa	attgtgtttt	12000
ctatgttggc	ttctctgcag	agaaccagtg	taagctacaa	cttaactttt	gttggaaaca	12060
attttccaaa	ccgccccttt	gccctagtg	cagagacaat	tcacaaacac	agccctttta	12120
aaaggcttag	ggatcactaa	ggggatttct	agaagagcga	ccgtaatcc	taagtattta	12180
caagacgagg	ctaacctcca	gcgagcgtga	cagcccagg	aggggtgcgag	gcctgttcaa	12240
atgctagctc	cataaataaa	gcaatttctc	ccggcagttt	ctgaaagtag	gaaagggtac	12300
atttaagggt	gcgtttgtta	gcatttcagt	gtttgccgac	ctcagctaca	gcattccctgc	12360
aaggcctcgg	gagaccaga	agtttctcgc	cccttagatc	caaacttgag	caacccggag	12420
tctggattcc	tgggaagtcc	tcagctgtcc	tgcggtgtgt	ccggggcccc	aggtctggag	12480

gggaccagt	gcccgttggc	ttctactgct	gggctggaag	tcgggctcc	tagctctgca	12540
gtccgaggt	tggagccagg	tgcctggacc	ccgaggctgc	cctccaccct	gtgcggggcg	12600
gatgtgacca	gatgttggcc	tcacttgcca	gacagagtgc	cgggggccag	ggtcaaggcc	12660
gttgtggctg	gtgtgaggcg	cccgggtgcg	ggccagcagg	agcgcctggc	tccatttccc	12720
accctttctc	gacgggaccg	ccccgggtgg	tgattaacag	atttgggggt	gtttgctcat	12780
ggtggggacc	cctcgccgcc	tgagaacctg	caaagagaaa	tgacgggcct	gtgtcaagga	12840
gccaagtgc	cggggaagt	ttgcaggagg	gactccggg	aggtcccgcg	tgcccgtcca	12900
gggagcaatg	cgctcctcgg	ttcgtcccca	gcccgcgtct	cgccgctccg	tcctcccctt	12960
cacgtccggc	attcgtgggt	cccggagccc	gacgccccgc	gtccggacct	ggaggcagcc	13020
ctgggtctcc	ggatcaggcc	agcggccaaa	gggtcgccgc	acgcacctgt	tcccagggcc	13080
tccacatcat	ggccccctcc	tcgggttacc	ccacagccta	ggccgattcg	acctctctcc	13140
gctggggccc	tcgctggcgt	ccctgcaccc	tgggagcgcg	agcggcgccg	gggcggggaa	13200
gcgcggccca	gacccccggg	tcgccccgga	gcagctgcgc	tgctggggcc	aggccgggct	13260
cccagtggat	tcgcgggcac	agacgcccag	gaccgcgctt	cccacgtggc	ggagggactg	13320
gggacccggg	cacccgtcct	gccccctcac	cttcagctc	cgccctcctc	gcgcggaccc	13380
cgccccgtcc	cgacccctcc	cggggtcccc	gcccagcccc	ctccggggcc	tcccagcccc	13440
tccccttctc	ttccgcggcc	ccgcccctct	ctcgcgggcg	gagtttcagg	cagcgctgcg	13500
tcctgctgcg	cacgtgggaa	gccttgcccc	cggccacccc	cgcgatgccg	cgcgctcccc	13560
gctgccgagc	cgtgcgctcc	ctgctgcgca	gccactaccg	cgaggtgctg	ccgctggcca	13620
cgttcgtgcg	gcgcctgggg	ccccagggct	ggcggtggtg	gcagcgcggg	gacccggcg	13680
ctttccgcgc	gctggtggcc	cagtgccttg	tgtgcgtgcc	ctgggacgca	cgcccgcccc	13740
ccgccgcccc	ctccttccgc	caggtggggc	tccccggggt	cggcgtccgg	ctgggggtga	13800
gggcggccgg	ggggaaccag	cgacatgcgg	agagcagcgc	aggcgactca	gggcgcttcc	13860
cccgcagggt	tcctgcctga	aggagctggt	ggcccagagt	ctgcagaggc	tgtgcgagcg	13920
cggcgcgaag	aacgtgctgg	ccttcggctt	cgcgtgctg	gacggggccc	gcggggggcc	13980
ccccgaggcc	ttcaccacca	gcgtgcgcag	ctacctgccc	aacacggtga	ccgacgcact	14040
gcgggggagc	ggggcggtgg	ggctgctgct	gcgcgcgctg	ggcgacgacg	tgctggttca	14100
cctgctggca	cgtgcgcgc	tctttgtgct	ggtggctccc	agctgcgcct	accaggtgtg	14160
cgggccgccc	ctgtaccagc	tcggcgctgc	cactcaggcc	cgccccccgc	cacacgctag	14220
tggaccccca	aggcgtctgg	gatgcgaacg	ggcctggaac	catagcgtca	gggaggcccg	14280
ggtccccctg	ggcctgccag	ccccgggtgc	gaggaggcgc	gggggcagtg	ccagccgaag	14340
tctgccgttg	cccaagaggc	ccaggcgtgg	cgctgcccc	gagccggagc	ggacgcccgt	14400
tgggcagggg	tcctgggccc	acccgggcag	gacgcgtgga	ccgagtgacc	gtgggtttctg	14460
tgtggtgtca	cctgccagac	ccgcggaaga	agccacctct	ttggagggtg	cgctctcttg	14520
cacgcgccac	tcccacccat	ccgtgggccc	ccagcaccac	gcggggcccc	catccacatc	14580
gcggccacca	cgtccctggg	acacgccttg	tccccgggtg	tacgccgaga	ccaagcactt	14640
cctctactcc	tcaggcgaca	aggagcagct	gcggccctcc	ttcctactca	gctctctgag	14700
gccagcctg	actggcgctc	ggaggctcgt	ggagaccatc	tttctggggt	ccaggccctg	14760
gatgccaggg	actccccgca	ggttgccccg	cctgccccag	cgctactggc	aatgcgggcc	14820
cctgtttctg	gagctgcttg	ggaaccacgc	gcagtgcgcc	tacggggtgc	tcctcaagac	14880
gcaactgccc	ctgcgagctg	cggtcacccc	agcagccggt	gtctgtgccc	gggagaagcc	14940
ccagggtctc	gtggcgggcc	ccgaggagga	ggacacagac	ccccgtcgcc	tggtgcagct	15000
gtcccgccag	cacagcagcc	cctggcaggt	gtacggcttc	gtgcgggcct	gcctgcgcgc	15060
gctggtgccc	ccaggcctct	ggggctccag	gcacaacgaa	cgccgcttcc	tcaggaaacac	15120
caagaagtcc	atctccctgg	ggaagcatgc	caagctctcg	ctgcaggagc	tgacgtggaa	15180
gatgagcgtg	cgggactgcg	cttggctgcg	caggagccca	ggtgaggagg	tggtggccgt	15240
cgagggccca	ggccccagag	ctgaatgcag	taggggtcca	gaaaaggggg	caggcagagc	15300
cctggtcctc	ctgtctccat	cgtcacgtgg	gcacacgtgg	cttttcgctc	aggacgtcga	15360
gtggacacgg	tgatcgagtc	gactcccttt	agtgagggtt	aattgagctc	gcggccgc	15418

<210> 2
 <211> 7498
 <212> DNA
 <213> Mus sp.

<220>
 <223> Mouse TERT promoter

<400> 2

aagcttccag	caaad/cagtt	agagctgagt	tgatgctctg	aagaagagaa	aatgtagaga	60
cggtagtgaa	caaataatgt	ctgggcaaac	ctcagacatg	aaaatggaag	acgtggaaat	120
ccagagaact	ctgagggaaa	ataaaacaca	actccaggtc	atcacgggac	tcatcaaact	180
gctgaggtgc	agccacagag	aaaaatctta	aaatagccta	gaacgatgca	tgacacataa	240
agcacagaga	agacgaagct	gagtcctgtct	tgtaggaaca	acttgagaag	acctaaacca	300
ctgcaatgag	tgcatctctgc	taacttagaa	tttgctaccc	agttcagatc	caaaaagggt	360
ttcacaaaagt	tcaacacaaa	acagtagcag	gagtggttaa	gggggacaca	ctgataggaa	420
ttcagagaag	tagggaatgc	tcatatgggg	acattacaaa	atgtactttc	atgttgctta	480
aatcattttta	attgtcaacc	acatcaagct	aaataatgct	ttgagggttc	taacatttgg	540
agattatgtc	tacactagca	gagaaggcac	caataacatc	ccaattgcta	gattctcata	600
gaatcatgag	tcacaatggc	agagacaggt	tctgagagtg	tgtccttggt	gtaaacagta	660
tgctctacaa	actaagttgg	ctgcaatatc	actaggcagt	gttgtcccat	aagacaacta	720
tcacatatgt	ggtccagtg	tgaccaaagc	atcttttagc	attttgcaaa	tgaagctcaa	780
atcgaatatg	actaagctca	tgcagtacaa	atcaaaggta	cactgggata	gtttaaagaa	840
tacatacttg	tactggttag	ttttgtgtca	gcttgacaca	gctggagtta	tcacagagaa	900
aagagcttca	gttgaggaaa	ttcctccatg	agatccagct	atagggcatt	ttctcaatta	960
gtgatcaagg	ggggaaggcc	ccttggtggg	gggaccatct	ctgggctggt	agtcttggtt	1020
ctataagaga	gcaggctgag	caagcgagg	gaagcaagcc	agtaaagaac	atccctccat	1080
ggctctcgca	tcagctcctg	ctccctgacc	tgcttgagtt	ccagttctaa	cttctttcag	1140
tgatgaacag	caatgtggaa	atgaaagctg	aataaaccct	ttcctcccca	ttttgcttct	1200
tggtcatgat	gtttgtgcag	gaatagaaac	cctgactaag	acaatactat	aaaccctaaa	1260
agttgtaaac	caaacacatg	tgtttccatt	aagccatcgt	agaacaataa	gtactcaacc	1320
ccaagtcaca	taactataat	cccagccttt	gaaaaccggg	atcaggaatt	caaggctagc	1380
ctcatctata	tgtaagatta	aagcctgttt	gggctgcatg	agactttggt	tcaaaaaaaaa	1440
aaaaaaaaaaaa	gcaaacaggc	aaaaacaaac	acaagacaag	acagatgtaa	aatgaaggag	1500
gggtagatgg	gtcaagtaga	aaatagcata	ggaaacgagt	caagtataga	agaggtggta	1560
gtaaccagat	catgcagaag	gactcaaggc	catctcctca	cagtggttta	ggtaggcctt	1620
cctctgctct	tgagcagggg	cagagttgcc	gctttaagga	ggggatcagt	cacctttaag	1680
aactgaaaag	ctgaacagtc	ttctcaagtc	agaagccagt	ggcttcatct	tacacctctc	1740
ttccttccct	tgctactcat	attggatctg	atgatttgcc	caacttgga	gaaacatctc	1800
ttctgaaggg	tttcacagac	accccatctt	tccgagaaa	gaccgcatag	gctggccatc	1860
cctgtgctta	caaaaagga	aattaagaaa	cttaattcca	taagcaaata	caacctttcc	1920
aagccccaag	tggtatgatt	tatcttactg	tttttttata	tctcatcaaa	taacttccaa	1980
gggctcaaaa	atccaaagat	gtaaaaaagg	aactgagctc	tgtttgccaa	gccataggga	2040
ttaaataatg	acattcaaag	agatttttgt	gccctaagta	ctttttattg	gttttcatag	2100
atggtttaat	gtgcaagatg	aagcaaacag	agatgggagt	ggtatcagca	tggttaagg	2160
tggcagttgt	gagggagggg	tactgagaga	acaggacaag	gtaacctatc	taaggagagg	2220
ccaagtgtgc	aagtgccagc	gacttctaag	cccagaacta	gtacacattc	cttaggtgct	2280
gtttgggaag	tcagggagtc	accagccttg	ggatctataa	aagtgcattg	tggcattcac	2340
tcacatactt	cctgagctgt	tcgatgttga	tgaaagtcgt	ggtagagac	tggtgtgtca	2400
gtgacaaaact	atgtaaatga	gaatgattgt	ttccatcttg	accactaaga	cgtaaaccgg	2460
ttccagtgat	ctccaaacat	ggcaagctac	agcagagcag	cagccccatc	cagagccttg	2520
ccctggttct	gaatggggga	gaatccagtg	ggagtcgggt	gctgccagca	tggtggggta	2580
gaaggctgga	gcatgacagg	tccccgagga	tttcttgctt	cctatatggg	tagggatact	2640
tgaggctctc	tcttctacct	ccttccctgc	agggtttata	acctctacca	ctgtctgtct	2700
ctgggatagc	tcctagggtg	cagccccctc	ccaaaaaggc	ctctccctgg	cctcatgtct	2760
ctaagaacag	ctttctaaag	caggcctgtt	acacaaaggc	tcccttttcc	tggttccatc	2820
gttgctggta	gacaacttcc	actcgttttc	cacttcagtt	tcttctactc	tggtgttatt	2880
tgattctgat	gcttgaaccc	aggggttgtgt	agtcagcaag	tgctaccccc	tccctcctct	2940
tctttgtttt	tttgaggcag	gggtctcatt	tgcccaagtg	gacctaaatt	tcagcatgta	3000
gctggcctgg	ttttgaatgc	cttctcatcc	tgctctact	tcccaagagt	agcttacaag	3060
tgtgcaccac	catgccccgc	gatattctta	tttttgagac	tgttttctat	gctgggttct	3120
ttggggaaact	acactaaggt	agcttacaag	tgtgcaccac	catgccccgc	gatattctta	3180
tttttgagac	tgttttctat	gctggtttct	ttggggaaact	acactaaggt	agcttcattg	3240
ttggcataaaa	tttctcagtt	caggccccata	tctcctaagt	agcagaacta	agcaaatctc	3300
aaacaaaacc	ctcaaaaaga	ctgatgtcca	ctaaacggac	ttctaaaata	gctcctgtaa	3360
tcttgagcat	ttacaaggcg	gcagacctcc	tataaggggag	taaatatgaa	aacgcgcctg	3420
ttcaaatgct	aggtcgggtg	atagaagcaa	tttctcaga	aagctgaagg	caccaaagg	

ttacatatgc	cccccaaca	acccccaccc	ctatcctacc	cccgctcac	acgtgcaagt	3660
actatcacag	ttgccaacct	agcagcagctg	ccatcctaag	gtcagggctg	ccgctttggc	3720
tgtgtgcaca	ggcaagcgcc	ctcacccaat	ggccctggcc	ttgctatggg	tgcgtgagtt	3780
gagatgatgc	tctggactct	gaggtgaagg	ccactggaac	agtgaaaaaa	gctaacgcag	3840
ggcttttacc	tagtcccctt	cctttgggtg	tgggtgttta	cggaacatat	ttgggatctg	3900
agtgtatggt	gcgaccacaa	taaagcctta	acctatatag	tagaatttca	gctgtaatca	3960
ttaagaactg	agattgccac	cacccacctc	actgtctgtg	tcaaccacag	caggctggag	4020
cagtcagctc	aggaacaggc	aaaaccttag	gtccctccgc	ctacctaacc	ttcaatacat	4080
caaggatagg	cttctttgct	tgcccaaacc	tgcgccaggt	ctagaccacc	tggggattcc	4140
cagctcaggg	cgaaaaggaa	gcccgagaag	cattctgtag	agggaaatcc	tgcatgagtg	4200
cgcccccttt	cgttactcca	acacatccag	caaccactga	acttggccgg	ggaacacacc	4260
tggtcctcat	gcaccagcat	tgtgaccatc	aacggaaaag	tactattgct	gcgaccccg	4320
cccttcggct	acaacgcttg	gtccgcctga	atcccgcgcc	ttcctccgtt	cccagcctca	4380
tctttttcgt	cgtaggactct	cagtggcctg	ggctcctggct	gtttttctaag	cacacccttg	4440
catcttggtt	cccgcacgtg	ggaggcccat	cccggccttg	agcacaatga	cccgcgctcc	4500
tcgttgcccc	gcggtgcgct	ctctgctgcg	cagccgatac	cgggaggtgt	ggccgctggc	4560
aacctttgtg	cggcgccttg	ggcccagagg	caggcggctt	gtgcaacccg	gggacccgaa	4620
gatctaccgc	acttttggtg	cccaatgcct	agtgtgcatt	cactggggct	cacagcctcc	4680
acctgccgac	ctttcctttc	accaggtggg	cctccaggcg	ggatccccat	gggtcagggg	4740
cggaaaaggcg	ggaggacgtg	ggatagtgcg	tctagctcat	gtgtcaagac	cctcttctcc	4800
ttaccaggtg	tcatccctga	aagagctggt	ggccagggtt	gtgcagagac	tctgcgagcg	4860
caacgagaga	aacgtgctgg	cttttggtct	tgagctgctt	aacgaggcca	gaggcggggc	4920
tcccatggcc	ttcactagta	gcgtgcgtag	ctacttgccc	aacactgtta	ttgagaccct	4980
gcgtgtcagt	ggtgcatgga	tgctactgtt	gagccgagtg	ggcgacgacc	tgctggtcta	5040
cctgctggca	cactgtgctc	tttatcttct	ggtgcccccc	agctygtcct	accaggtgtg	5100
tgggtctccc	ctgtaccaa	tttgtgccac	cacggatact	tggccctctg	tgtccgctag	5160
ttacaggccc	acccgacccg	tgggcaggaa	tttactaac	cttaggttct	tacaacagat	5220
caagagcagt	agtcgccagg	aagcaccgaa	acccctggcc	ttgccatctc	gaggtacaaa	5280
gaggcatctg	agtcctacca	gtacaagtgt	gccttcagct	aagaaggcca	gatgctatcc	5340
tgtcccgaga	gtggaggagg	gaccccacag	gcaggtgcta	ccaaccccat	caggcaaata	5400
atgggtgcc	agtcctgctc	ggtcccccg	ggtgcctact	gcagagaaaag	atttgtcttc	5460
taaaggaaaag	gtgtctgacc	tgagtctctc	tgggtcggtg	tgctgtaaac	acaagcccag	5520
ctccacatct	ctgctgtcac	caccccgcga	aaatgccttt	cagctcaggc	catttattga	5580
gaccagacat	ttcctttact	ccagggggaga	tggccaagag	cgtctaaacc	cctcattcct	5640
actcagcaac	ctccagccta	acttgactgg	ggccaggaga	ctggtggaga	tcatctttct	5700
gggtcaagg	cctaggacat	caggaccact	ctgcaggaca	caccgtctat	cgcgctcgata	5760
ctggcagatg	cgccccctgt	tccaacagct	gctggtgaac	catgcagagt	gccaatatgt	5820
cagactcctc	aggtcacatt	gcaggtttcg	aacagcaaac	caacaggtga	cagatgcctt	5880
gaacaccagc	ccaccgcacc	tcatggattt	gctccgcctg	cacagcagtc	cctggcaggt	5940
atatggtttt	cttcgggcct	gtctctgcaa	gggtggtgtc	gctagtctct	ggggtaccag	6000
gcacaatgag	cgccgcttct	ttaaagaact	aaagaagttc	atctcgttgg	ggaaatacgg	6060
caagctatca	ctgcaggaac	tgatgtggaa	gatgaaagta	gaggattgcc	actggctccg	6120
cagcagcccg	ggtgagcatg	gctgggtctc	agctgaatgc	attagggggc	cagaaaaggg	6180
agacaatggg	tggcagtaac	ccaggtcccc	agtggtgtgg	tggctttatg	cagtcctggg	6240
ttggatgagt	tccatcttat	ggtctctgac	tccaagctcc	ctccagctcg	ccttgcaaaa	6300
actaagattc	ttgtccaagc	cctgggcagg	ttctcagggc	tggggacatt	gtggtgaaca	6360
gataagcaga	cggggagcat	ggtggatagg	agttctggca	cagtgacca	gagagagtct	6420
ggaagcgcta	gtgagagcta	atgtaagggc	ccgtggttcg	ccaaagaatg	ataaccccg	6480
actcaaatag	tatgccaaaag	caaggagcat	ttcattctgc	agaaatcaag	catgcagggt	6540
gggggggggg	gttgctctca	ttccaagatg	gagagacaac	caagtataga	ttttaagggg	6600
atcggggggc	tttatcttac	tccatctcta	ggggcattcc	attactgggg	catgggggtg	6660
gaggttgga	actgttaatg	gggaggtctg	gaaacttgct	gccccattgt	ccttgcttca	6720
ggctaggtag	ctgagtagct	tctaattggca	ggatagtttc	tgactagctg	tctaaagtct	6780
ggggtgtttg	tttttttggt	ttttctagta	acttacttgc	ctgaacttgc	tcagttttta	6840
ggcctggctc	cctggactgc	caatttgaag	cctattaagg	agtcagcctg	tctcactact	6900
ccaggttatc	tataatcccc	ctgtagaagc	gtacctcact	gataacaatg	acagaccaac	6960
ataggaacct	actatccttg	tgggtgcata	gtttcaaagg	ttcttctggt	cctccacgtg	7020
tgcagatcca	tgcttaagct	atggtcctcc				

gtggagcctg gtgcataaaa gaggattgtg ttacttggaa ggctgcagag cctggactcc 7260
 tgtgccctcc ttgcctgggt ttctgggttt aatgttgagg ttggccctct gtagtacta 7320
 cctgaccctc tccctttcag ccaaccctcc ggttacaccc tgtgcatgta tggaaggggc 7380
 caaacgcctc atcctgctct cccttcccc aatttcttag gatattaaca acttatgggg 7440
 aaaagatggt agagctatgt ttaccacca tgtacttggg aagctccgaa gtaagctt 7498

<210> 3

<211> 144

<212> DNA

<213> Artificial Sequence

<220>

<223> NCO1 fragment containing hTERT upstream sequences
 and the first intron of hTERT from lambdaGPhi5
 into the NCO1 site of a pBBS167 (variant of pUC
 cloning vector with MCS)

<400> 3

atgaccatga ttacgaattc gagctcggtg cccggggatc ctctagagtc gacctgcagg 60
 catgcccatt gcaggcctcg cgcgcgagat ctcggggcca atcgatgccg cggcgatatc 120
 gctcgaggaa gcttggcact ggcc 144

<210> 4

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: RA94

<400> 4

cccggccacc cccgcgaatt cgcgcgctcc ccgctgc 37

<210> 5

<211> 65

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: RA91

<400> 5

ttgtactgag agtgacccat atgcggtgtg catgctacgt aagaggttcc aactttcacc 60
 ataata 65

<210> 6

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: RA96

<400> 6

aattgcgaag cttacg 16

<210> 7
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: RA97

<400> 7
aattcgtaag cttcgc 16

<210> 8
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo RA101

<400> 8
taggtaccga gctcttacgc gtgctagccc cacgtggcgg agggactggg gacccgggca 60

<210> 9
<211> 58
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo RA100

<400> 9
taggtaccga gctcttacgc gtgctagccc ctcgctggcg tccctgcacc ctgggagc 58

<210> 10
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: RA107

<400> 10
cgtcctgctg cgcactcagg aagccctggc ccc 33

<210> 11
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 'B' class
E-Box just proximal to the hTERT initiating Met in
pGRN262

<400> 11

6

6

<220>
<223> Description of Artificial Sequence: RA122

<400> 16
gaccgcgctt cccactcagc ggagggactg ggg

33

<210> 17
<211> 298
<212> DNA
<213> Homo sapiens

<220>
<223> Human TERT promoter

<400> 17
caggccgggc cccagtgga ttcgcgggca cagacgcca ggaccgcgt tcccacgtgg 60
cggagggact ggggacccgg gcacccgtcc tgcccttca ccttccagct cgcctcctc 120
cgcgcggacc ccgccccgtc ccgacccctc ccgggtcccc ggcccagccc cctccggggc 180
ctcccagccc ctcccttcc tttccgcggc ccgcccctct cctcgcggcg cgagtttcag 240
gcagcgctgc gtctyctgc gcacgtggga agccctggcc ccggccaccc ccgcgatg 298

<210> 18
<211> 262
<212> DNA
<213> Mus sp.

<220>
<223> Mouse TERT promoter

<400> 18
cagcaaccac tgaacttggc cggggaacac acctggtcct catgcaccag cattgtgacc 60
atcaacggaa aagtactatt gctgcgaccc cgcccttcc gctacaacgc ttggtccgcc 120
tgaatccgc cccttccctc gtcccagcc tcatctttt cgtcgtggac tctcagtggc 180
ctgggtcctg gctgttttct aagcacaccc ttgcatcttg gttcccgac gtgggaggcc 240
catccgggcc ttgagcacia tg 262

<210> 19
<211> 77
<212> DNA
<213> Homo sapiens

<220>
<223> Human TERT promoter

<400> 19
ctcgcggcgc gagtttcagg cagcgctgcg tcctgctgcg cacgtgggaa gccctggccc 60
cggccacccc cgcgatg 77

<210> 20
<211> 89
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: E-box reporter
construct

<400> 20

ctcgcggcgc gagtttcagg cagcgctgcg tctgtctgcg cagcgggaa gccctggccc 60
cggccacccc cgcaattcg cccaccatg 89

<210> 21

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: E-box reporter
construct (with portion deleted)

<400> 21

ctcgcggcgc gagtttcagg cagcgctgcg tctgtctgcc gaattcgccc accatg 56

<210> 22

<211> 497

<212> DNA

<213> Homo sapiens

<220>

<223> Human TERT promoter

<400> 22

actccagcat aatcttctgc ttccatttct tctcttcctt cttttaaaat tgtgttttct 60
atgttggtt ctctgcagag aaccagtgtg agctacaact taacttttgt tggaacaaat 120
tttccaaacc gcccttttgc cctagtggca gagacaattc acaaacacag ccctttaaaa 180
aggcttaggg atcactaagg ggatttctag aagagcgacc cgtaatccta agtatattaca 240
agacgaggct aacctccagc gagcgtgaca gcccagggag ggtgagaggc ctgttcaaata 300
gctagctcca taaataaagc aatttcctcc ggagtttctt gaaagtagga aagggtacat 360
ttaagggtgc gtttggttagc atttcagtgt ttgccgacct cagctacagc atccctgcaa 420
ggcctcgga gaccagaag tttctcgccc cttagatcca aacttgagca acccgagatc 480
tggattcctg ggaagtc 497

<210> 23

<211> 425

<212> DNA

<213> Mus sp.

<220>

<223> Mouse TERT promoter

<400> 23

caagtgtgca ccaccatgcc ccgcgatatt cttatttttg agactgtttt ctatgctggt 60
ttctttgggg aactacacta aggtagcttc attgttgga taaatttctc agttcaggcc 120
catatctcct aagtagcaga actaagcaaa tctcaaaaca acccctcaaa aagactgatg 180
tccactaaac ggacttctaa aatagctcct gtaatcctga gcatttaca ggcggcagac 240
ctcctataag ggagtaaata tgaaaacgag cctgttcaaa tgctaggtcg gtggatagaa 300
gcaatttcct cagaaagctg aaggcaccaa aggttatatt tggttagcatt tcagtgtttg 360
ccaaactcag ctacagtaga gatcacagat tccctatttc ccagagattc aaaattcagc 420
agccc 425

00740-6E0E7960